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EXAMINER	
JIANG, YONG HANG	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/530,588	BLAKER ET AL.	
	Examiner	Art Unit	
	YONG HANG JIANG	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-17 and 23-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-17 and 23-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/4/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on 12/20/2007 has been entered. Claims 2-3, and 18-22 are cancelled. Claims 25-31 are newly added. Claims 1, 8, 12 and 17 are amended. Claims 1, 4-17, and 23-31 are still pending, with claims 1, 8, 12, and 17 being independent.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "the request to begin training" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by King et al. (US 6,271,765).

Regarding claim 8, King et al. disclose a method of training a wireless control system (via transmitter system 20) on a vehicle (40) for wireless control of a remote electronic system (gate 44A associated with receiver 42A) based on the location of the vehicle, comprising:

automatically storing data associated with a signal for controlling a remote electronic system transmitted in proximity to the wireless control system (via upon activating user input device 34 and one of the switches 32A-C, the transmitter system 20 automatically stores data in the learning mode);

receiving a current location for the vehicle (via GPS receiver on sensor 30);

providing control data (via processor 26) for a signal to be sent wirelessly for the remote electronic system (gate 44A associated with receiver 42A) based on the automatically stored data;

and associating the current location for the vehicle with the wireless control signal for the remote electronic system (via storage 27A storing the location of the transmitter system 20 and the vehicle 40 at the time the learning mode button 34 is pressed). (See Col. 3, lines 5-13; and Col. 1, line 50 to Col. 2, line 61; and the Abstract)

Regarding claim 9, King et al. disclose a request to begin training is received via a pushbutton (via activating learning mode by activating user input device 34 and one of the switches 32A-C). (See Col. 3, lines 5-13)

Regarding claim 10, King et al. disclose the method further comprising receiving an indication from the user as to which of a plurality of wireless control signals is to be transmitted based on the location of the vehicle (via storage 27A storing the location of

the transmitter system 20 and the vehicle 40 at the time the learning mode button 34 is pressed). (See Col. 3, lines 5-13)

Regarding claim 11, King et al. disclose the method further comprising: receiving a wireless signal having a data code; and identifying and storing the data code on the wireless signal (via transmitter system 20 placed in learning mode), whereby the wireless control system can wirelessly control the remote electronic system by transmitting the data code of the wireless signal. (See the Abstract and Col. 3, lines 5-13)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 4-7, 12-17, 23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. (US 6,271,765), and further in view of Kemink et al. (US 6,563,430).

Regarding claims 1, 25, 26 King et al disclose a wireless control system (via transmitter system 20) for customizing a wireless control signal for a remote electronic system (gate 44A associated with receiver 42A) based on the location of the wireless control system, comprising:

a transmitter circuit (via transmitter 22) configured to transmit the wireless control signal having control data which will control the remote electronic system (gate 44A associated with receiver 42A); an interface circuit (via sensor 30) configured to receive navigation data from a navigation data source (GPS receiver); and a control circuit (Processor 26) coupled to the transmitter circuit and the interface circuit configured to receive a transmit command (from processor 26 based on location), to receive navigation data, to determine a current location based on the navigation data (via sensor 30 determines the position of the transmitter system 20 relative to earth), and to command the transmitter circuit to transmit a wireless control signal associated with the current location (via transmitter 22 on transmitter system 20 transmits a signal associated with receiver 42A based upon the position). (See Col. 1 line 50 to Col. 2, line 61 and the Abstract)

King et al. further disclose a plurality of user actuatable input devices to manually activate the remote electronic system. (See Col. 3, lines 41-43)

But King et al. fail to disclose at lest one of the user actuatable input devices are configured with the control circuit to provide the wireless control signal based on the current location when the least one of the user actuatable input device is actuated.

Kemink teaches a remote control device with location dependent interface. Depending on the location of the remote control, the user interface on the remote control changes functionality to control devices that are appropriate for a particular location. (See the Abstract; Col. 2, line 55 to Col. 3, line 60)

From the teachings of Kemink, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wireless control system of King to include at lest one of the user actuatable input devices are configured with the control circuit to provide the wireless control signal based on the current location when the least one of the user actuatable input device is actuated as taught by Kemink to provide location based functionality on the plurality of user actuatable input devices, thereby increasing the number of functions available on the user actuatable input devices.

Regarding claim 4, King et al. disclose the control circuit (processor 26) is operable in a training mode to record location data and wireless control signals in sets of data pairs (via the processor 26 includes storage 27A-C for storing a plurality of locations associated with gates 44A-C for operation), wherein each set of data pairs represents a location proximate to a remote electronic system associated with the wireless control signal stored in the data pair (via predetermined distance such as one hundred feet of one of the gates 44A-C). (See Col. 2, lines 5-16; and Col. 2, lines 35-45)

Regarding claim 5, King et al. disclose the control circuit (processor 26) is inherently configured to search a plurality of data pairs (via stored control data associated with each gate and location of each gate) to compare a current location to the location proximate to the remote electronic system stored in each data pair, and the control circuit is configured to command the transmitter to transmit the wireless control signal from a data pair when a location proximate to the remote electronic system for that data pair is proximate to the current location. (See Col. 2, lines 5-16; and Col. 2, lines 35-45)

Regarding claim 6, King et al. disclose the system further comprising a receiver circuit configured to receive a wireless signal, wherein the control circuit is configured to identify and store a data code on the wireless signal (via an inherent receiver circuit in transmitter system 20 to receive signals when the system 20 is placed in learning mode), wherein the wireless control signal transmitted by the transmitter circuit includes the stored data code. (See the Abstract and Col. 3, lines 5-13)

Regarding claim 7, King et al. disclose the control circuit is further configured to automatically associate (via learning mode button on user input device 34) a location with the stored data code and to store the location in a data pair with the stored data code. (See Col. 3, lines 5-13)

Regarding claim 12, King et al. disclose a method of transmitting a wireless control signal (via transmitter system 20) for controlling a remote electronic system (via gates 44A-C associated with receivers 42A-C) based on the location of a vehicle (40), comprising:

receiving an input from an input device indicative of a request to

receiving a current location for the vehicle (via GPS receiver on sensor 30); comparing the current location of the vehicle with a plurality of stored locations (via processor 26 compares the current location with the locations stored on storage 27A-C), each location associated with a wireless control signal (via control signals associated with the locations of gates 44A-C); determining the wireless control signal associated with the stored location closest to the current location (via processor 26 receiving location and velocity data from sensor 30 to determine which control signal to send); and transmitting the wireless control signal associated with the stored location closest to the current location (via transmitter 22 on transmitter system 20). (See Col. 1 line 50 to Col. 2, line 61; and Col. 3, lines 5-13; and the Abstract)

King et al. further disclose receiving an input from an input device indicative of a request to transmit a wireless control signal (See Col. 3, lines 41-43).

But King et al. fail to disclose the wireless control signal transmitted by receiving an input from an input device indicative of the request to transmit is location dependent.

Kemink teaches a remote control device with location dependent interface. Depending on the location of the remote control, the user interface on the remote control changes functionality to control devices that are appropriate for a particular location. (See the Abstract; Col. 2, line 55 to Col. 3, line 60)

From the teachings of Kemink, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify method disclosed by King et al. to include the wireless control signal transmitted by receiving an input from an input

device indicative of the request to transmit is location dependent as taught by Kemink to provide location based functionality on the input device, thereby making the input device multi-functional.

Regarding claim 13, King et al. disclose transmitting the wireless control signal associated with the stored location closest to the current location includes transmitting the wireless signal only upon determining that the current location is within a predefined distance of the stored location. (See Col. 2, lines 36-45)

Regarding claim 14, King et al. disclose the control data is configured to control a garage door opener (via gates 44A-C). (See Col. 2, lines 17-34)

Regarding claim 15, King et al. disclose the step of transmitting includes transmitting a plurality of wireless control signals (control signals associated with gates 44A-C) having different control data which will control a plurality of remote electronic systems (receivers 42A-C associated with gates 44A-C) when the comparing the current location of the vehicle with a listing of stored locations indicates that the vehicle is near the remote electronic systems. (See Col. 2, lines 17-61)

Regarding claim 16, King et al. disclose the navigation data source is a vehicle compass (via GPS receiver). (See Col. 1, lines 59-67)

Regarding claim 17, King et al. disclose a transmitter (via transmitter system 20) for wirelessly controlling a plurality of remote electronic systems (via gates 44A-C associated with receivers 42A-C) at one of a plurality of locations, comprising:
a memory (via storage 27A-C) configured to store a plurality of control data messages and a plurality of locations, each control data message configured to control a different

remote electronic system (via control signals for gates 44A-C associated with receivers 42A-C), the memory configured to associate each location with a plurality of control data messages (via different control signals stored on by transmitter system 20 when vehicle 40 is traveling away or towards gates 44A-C); a transmitter circuit (via transmitter 22);

and a control circuit (via processor 26) configured to command the transmitter circuit to transmit wireless control signals in response to an actuation of user-actuatable input devices, each wireless control signal containing a different control data message (via user-input devices 32 could also be activated manually to open and close the gates 44A-C). (See Col. 1, line 50-Col. 2, line 61; and Col. 3, lines 5-14 and lines 41-43; and the Abstract)

But King et al. fails to disclose the plurality of wireless control signals transmitted is in response to an actuation of a user-actuatable input device, and are based on a location of the transmitter.

Kemink teaches a remote control device with location dependent interface. Depending on the location of the remote control, the user interface on the remote control changes functionality to control devices that are appropriate for a particular location. (See the Abstract; Col. 2, line 55 to Col. 3, line 60)

From the teachings of Kemink, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmitter of King et al. to include the plurality of wireless control signals transmitted is in response to an actuation of a user-actuatable input device, and are based on a location of the transmitter as

taught by Kemink to provide location based functionality on the input device, thereby making a single input device multi-functional.

Regarding claim 23, King et al. disclose the control circuit (processor 26) is configured to be programmed by the user as to which of the wireless control signals are to be transmitted in response to the single event (within one hundred feet). (See Col. 3, lines 5-13).

9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. in view of Kemink et al. as applied to claim 17 above, and further in view of O'Donnell et al. (US 5,414,426).

Regarding claim 24, the combination of King et al. and Kemink et al. disclose the structural elements of the claimed invention wherein King et al. disclose the transmitter further comprising a plurality of operator-actuatable switches coupled to the control circuit to transmit a plurality of wireless control signals (via the user input devices 32 could also be activated manually to open and close the gates 44A-C, Col. 3, lines 41-43).

But the combination of King et al. and Kemink et al. fails to disclose the control circuit is user-programmable such that one of the switches causes the transmitter to send two wireless control signals simultaneously or in sequence.

O'Donnell et al. teaches a transmitter (remote control) that is user programmable such that depression of a MACRO key enables the remote control to send multiple wireless control signals in sequence. (See the Abstract, Col. 5, lines 1-8, and lines 49-57)

From the teachings of O'Donnell et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of King et al. and Kemink et al. to include the control circuit is user-programmable such that one of the switches causes the transmitter to send two wireless control signals simultaneously or in sequence as taught by O'Donnell et al. to increase the convenience of a user.

10. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. as applied to claim 26 above, and further in view of Van Horn et al. (US 6,326,889)

Regarding claim 27, King et al. disclose the structural elements of the claimed invention but fail to disclose the control circuit is configured to provide an indicator if current location is not in proximity to a location associated with a wireless control signal associated with the at least one of the user actuatable input devices.

Van Horn et al. teach a transmitter (remote communication device 12) with a control circuit configured to provide an indication if the transmitter is out of range of proper operation. (See the Abstract, Col. 6, lines 52-65; and Col. 9, lines 9-13)

From the teachings of Van Horn et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmitter of King et al. to include the control circuit is configured to provide an indicator if current location is not in proximity to a location associated with a wireless control signal associated with the at least one of the user actuatable input devices as taught by Van Horn et al. to notify users of improper operation, thereby saving power.

11. Claims 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. in view of Kemink et al. as applied to claim 1 above, and further in view of Dykema et al. (US 6,091,343).

Regarding claims 28 and 31, the combination of King et al. and Kemink et al. disclose the structural elements of the claimed invention but fails to disclose a vehicle interior element coupled to the transmitter circuit and the control circuit, wherein the wireless control system or the transmitter is configured for mounting in a vehicle interior.

Dykema et al. teach a vehicle wireless transmitter system that is mounted within the vehicle overhead console. (See Col. 4, line 64 to Col. 5 line 12, Figure 1)

From the teachings of Dykema et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of King et al. and Kemink et al. to include a vehicle interior element coupled to the transmitter circuit and the control circuit such as an overhead console for mounting in a vehicle interior as taught by Dykema et al. to install the transmitter or the wireless control system in a vehicle, thereby making the transmitter more convenient to use.

12. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al.

Regarding claim 29, King et al. disclose the method further comprising receiving a user input indicative of a request to train the wireless control system (via activating learning mode by activating user input device 34 and one of the switches 32A-C). (See Col. 3, lines 5-13) and providing control data for a signal to be sent wirelessly for the remote electronic system comprises providing the control data in response to the user

input (via user-input devices 32 could also be activated manually to open and close the gates 44A-C). (Col. 3, lines 41-43)

But King et al. fails to disclose the control data is only provided in response to the user input.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed by King et al. and make it active only by providing the control data only in response to the user input to prevent unwanted activation of the remote electronic system in situations where passive activation of the remote electronic system is unnecessary.

Regarding claim 30, King et al. teach a passive garage door opener system that is location sensitive (see the Abstract); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed by King et al. to include providing the control data only in response to the user input when the user input is received in proximity to the current location as taught by King et al. to activate a system based on location, thereby saving power since the control data is provided only in proximity of the current location.

Response to Arguments

13. Applicant's arguments with respect to claims 1, 4-7, 12-17, and 23-24 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to claim 8 on page 8 have been fully considered but they are not persuasive. Applicant argues King et al. does not identically disclose the added limitation in the amended claim, “automatically storing data

associated with a signal for controlling a remote electronic system transmitted in proximity to the wireless control system", the examiner respectfully disagrees. King et al. disclose the added limitation via (upon activating user input device 34 and one of the switches 32A-C, the transmitter system 20 automatically stores data in the learning mode, See Col. 3, lines 5-13); therefore, the claimed invention as claimed in claims 8-11 is anticipated by King et a. (US 6,271,765).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONG HANG JIANG whose telephone number is (571)270-3024. The examiner can normally be reached on M-F 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian A. Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. J./
Examiner, Art Unit 2612

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612